

ABSTRACT

A method of forming a metal seed layer, preferably a copper layer, for subsequent electrochemical deposition. The metal seed layer is formed by the oxidation-reduction reaction of a metal salt with a reducing agent present in a layer on the substrate to be plated. Metal interconnects for semiconductor devices may be produced by the method, which has the advantage of forming the metal seed layer by a simple electrochemical plating process that may be combined with the plating of the interconnect itself as a single-bath operation.

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